Gulf of Mexico Harmful Algal Bloom Bulletin

27 September 2004

National Ocean Service/NCCOS and CSC

NESDIS/CoastWatch and NDBC

Last bulletin: September 24, 2004

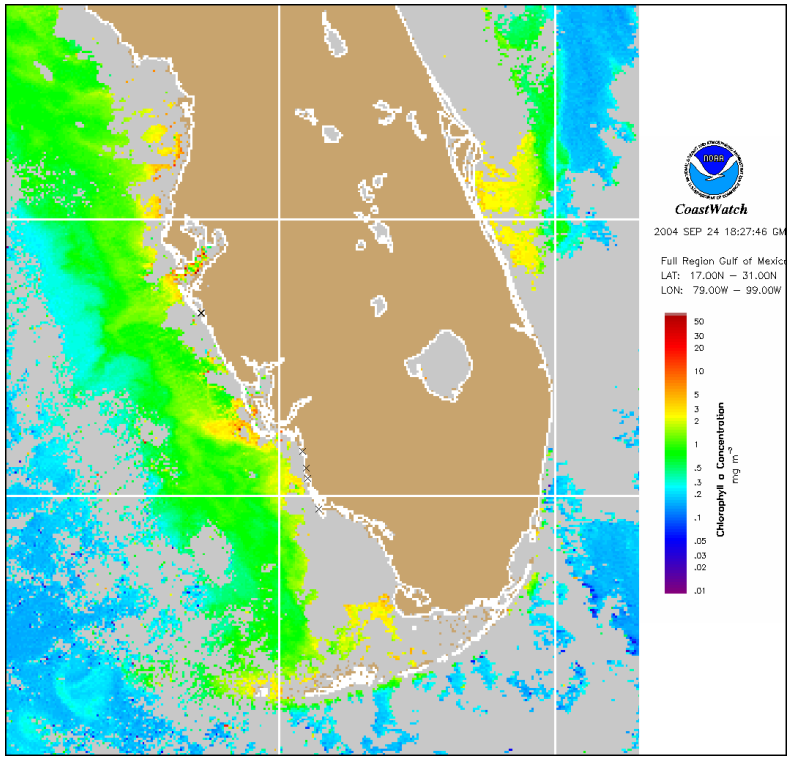
Analysis

No harmful algal blooms have been confirmed along Floridas Gulf Coast. Sustained strong winds and heavy surf from Hurricane Jeanne have stirred up the water so some harmless water discoloration may occur over the next few days.

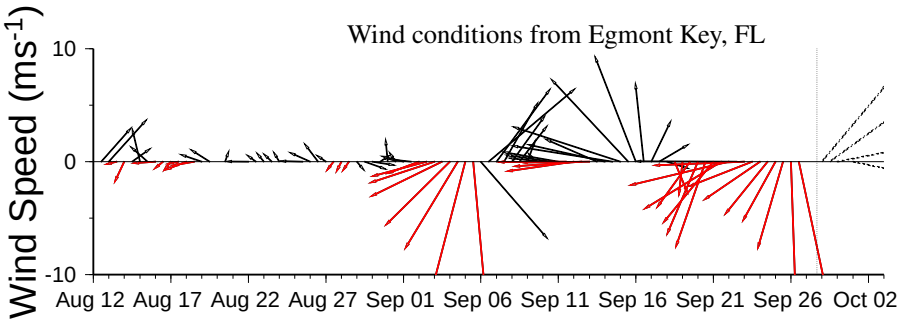
SW Florida. A region of high chlorophyll (>3µg/L) was present offshore of Sanibel and Captiva Islands (82º19W 26º27N) on September 24, before Hurricane Jeanne. Cell counts last week in Sarasota, Naples, Marco Island, and Venice indicate that there was no Karenia brevis present, but cell counts are not available for Sanibel-Captiva. Jeanne produced potential for strong upwelling, but also potential for strong southerly movement. Onshore transport is possible through tomorrow and upwelling favorable conditions are forecasted through Friday.

Florida Panhandle. Elevated chlorophyll is present to the south and west of Cape San Blas from 85º45W 29º47N to 82ºW 29º23N. Chlorophyll concentrations above 5µg/L along the shoreline just west of Apalachicola Bay. This is likely due to resuspension resulting from Tropical Storm Ivan and a cold front. Reports of discolored water are possible.

Stolz, Fenstermacher

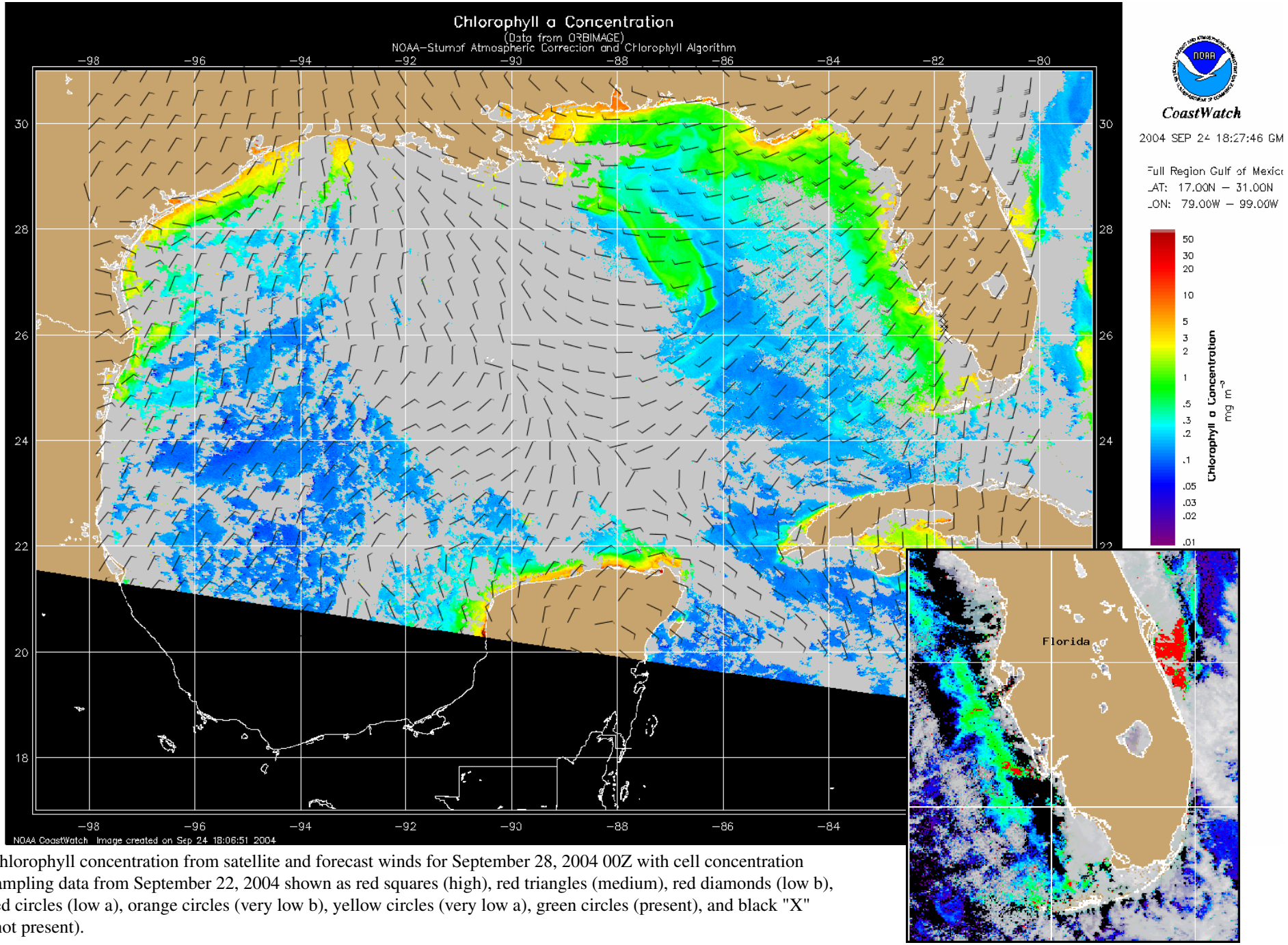


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from September 22, 2004 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Strong northerly winds have been replaced by strong westerlies today and tomorrow. Contrary to this model prediction, the NWS Marine forecast calls for northerly to northeasterly winds through Friday. FL Panhandle: Strong northerly winds the past few days have shifted to strong westerly and southwesterly winds through tomorrow. Winds clocking around to the northeast through Friday.



Chlorophyll concentration from satellite and forecast winds for September 28, 2004 00Z with cell concentration sampling data from September 22, 2004 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)

Wind conditions from Tyndall AFB Tower C